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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/913,799	12/31/2001	Yoshinari Ikegami	KOD65B.001APC	4038
20995	7590	11/03/2003	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP			BHAT, NINA NMN	
2040 MAIN STREET			ART UNIT	
FOURTEENTH FLOOR			PAPER NUMBER	
IRVINE, CA 92614			1761	

DATE MAILED: 11/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary**Application No.**

09/913,799

Applicant(s)

IKEGAMI ET AL.

Examiner

N. Bhat

Art Unit

1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 November 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 and 14 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Shibata Teruhiko JP 60-255729.

Shibata Teruhiko JP 60-255729 teaches a mineral nutrient enriching agent utilizing seawater which is desalted, to the desalted water is concentrated or dried or diluted and then sterilized and is used as a main component in a beverage. One or more kinds of vitamins, saccharides and proteins are added to the product to obtain a mineral nutrient-enriching agent. The beverage and method of making the beverage as described by Teruhiko JP 60-255729 fully meet applicant's invention.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
5. Claims 2-3, 7-13, 16, and 21-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata Teruhiko JP 60-255729 or Sachiko JP 09-290260 in combination with Iwata further in view of Sommerville et al.

Shibata Teruhiko JP 60-255729 teach that sea water is desalted using ion-exchange membrane. The desalted seawater is concentrated or dried or diluted and then sterilized. To the desalted water one or more kinds of vitamins, saccharides and proteins are added to obtain a mineral nutrient-enriching agent, which can be used as a nutritional supplement or beverage. [English abstract only]

Sachiko JP 09-290260 teaches a method and device for producing drinking water and salt from the salt water by using a reverse osmosis process. The concentrated water discharged from the reverse osmotic membrane is supplied to an electro dialysis vessel, which is then concentrated in an evaporator and solid salt is dried. The permeate water discharged from the reverse membrane and the evaporated water from the evaporator are mixed and then supplied as drinking water. [English abstract only]

Iwata teaches a process of obtaining fresh water from seawater by passing the seawater through a plurality of precipitation tanks to which alternating current is supplied which desalts the water. The amount of salt is reduced as the seawater passes through each of the precipitation tanks. The resulting water is highly nutritious which contains increased oxygen. The fresh water is subsequently sterilized to remove and colon bacilli from the water. [abstract, column 5, line 20 et seq.]

Sommerville et al. teaches a method converting brines into useful products by recovering one or more products such as minerals, magnesia, salt from brines, seawater or effluent from a seawater desalination or other inland brines. Iron and magnesium are principle ingredients removed from the seawater or brines. Sommerville teaches a process, which provides purified water as one of the useful products from the process.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide a drink, which comprises desalted seawater to which water-soluble mineral components are added from reading the above references. Each of the references teach a method or process of providing desalinated water from seawater which is used in a beverage, Shibata Teruhiko JP 60-255729 specifically teaches that seawater is desalinated then concentrated or diluted or dried and then sterilized and then can be admixed with vitamins, saccharides proteins and other minerals to provide a mineral nutrient enriching agent which can be used as a supplement or beverage drink. The desalted seawater from Shibata Teruhiko JP 60-255729, Sachiko JP 09-290260 or Iwata et al. would inherently possess the water soluble minerals because the seawater has minerals such as magnesium, sodium chloride and other trace minerals in the water which may or may not be removed in the desalting process, further in applicant's method claim, applicant desalts, and then adds the salts back into the seawater thus, clearly showing that the minerals are inherently in the water. With respect to adding minerals from salt water into a drinking water composition, Sommerville et al. teaches that useful products can be obtained from

seawater, which includes, sea salt, fertilizers, minerals and drinking water. With respect to applicant's claims directed to obtaining the seawater for either the surface or from deep water, this recitation is considered obvious to one having ordinary skill in the art because applicant has not shown or taught in his specification that the depth of the water is critical especially in light of the fact, that applicant uses seawater from depths of a certain distance as well as surface water. It is well within the purview of the ordinary artisan familiar with water chemistry to discern that surface water would have a different chemistry than that of deep water, and is not only limited to chemistry, also bacteria and algae would be different based on the depth of the water. [Applicant is suggested to look at Finley USP 4,189,379 as an evidentiary document] Shibata Teruhiko JP 60-255729, Sachiko JP 09-290260, Iwata and Sommerville et al. teach using seawater and desalinating the seawater, the seawater used would encompass both surface water as well as deep water. Thus the combined teachings suggests to one having ordinary skill in the art to provide a potable water or drinking water composition which utilizes desalt water which is then enriched with mineral nutrients thus rendering the invention as a whole obvious.

6. Claims 4-6 and 17-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shibata Teruhiko JP 60-255729 or Sachiko JP 09-290260 in combination with Iwata further in view of Remesy WO99/40801.

Shibata Teruhiko JP 60-255729 or Sachiko JP 09-290260 in combination with Iwata teaches applicant's claims substantially as claimed. Specifically, these references teach providing drinking water from desalinating or desalting seawater. Shibata

Teruhiko JP 60-255729 specifically teaches desalting the water and then adding additional ingredients such as vitamins, minerals, saccharides, etc. to the water. As stated above, the desalinated seawater or desalted seawater inherently possesses water soluble mineral components in the water composition.

However, none of the references teach that the mineral components added to the water magnesium and calcium and that the weight ratio of the magnesium to calcium (Mg/Ca) is adjusted having a ratio of 4/1 to 1/3.

Remesy WO99/40801 teaches a beverage such as water, which is supplemented with calcium, and magnesium wherein the Ca/Mg weight ratio is ranged between 1 and 6 which provides a range, which overlaps with applicant's range. The magnesium and calcium are added to the water composition in water-soluble forms i.e. carbonates of magnesium and calcium. The water composition or beverage is prepared with specific weight ratios of magnesium and calcium for preventing osteoporosis and other therapeutic uses. [Note Column 5, lines 5-60 and Column 6, Examples 1-5]

It would have been obvious to one having ordinary skill in the art to provide a water from the desalted seawater as described by Shibata Teruhiko JP 60-255729 or Sachiko JP 09-290260 or Iwata, adding other ingredients to the desalted seawater is specifically taught in Shibata Teruhiko JP 60-255729 but does not specifically recite adding calcium and magnesium which are minerals inherently found in seawater as explained above. Remesy teaches that it is known in the art to provide water compositions or beverage compositions, which are enriched with minerals, specifically

calcium and magnesium. The addition of the calcium and magnesium agents to the water or beverage is within the range as taught by applicant. To use desalted water from seawater which is then enriched with calcium and magnesium would have been obvious to one having ordinary skill in the art because the suggestion to modify and enrich desalted seawater has been taught by Shibata Teruhiko JP 60-255729 as well as enriching water or a beverage with calcium and magnesium and to adjust the desalted seawater to provide a beverage has been taught by Remesy thus the combined suggestion to modify the desalted water with calcium and magnesium renders applicant's claims as a whole obvious.

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Someya et al. teach a mineral containing beverage which adds weathered hematypic coral to a water solution. A specific calcium or magnesium oxide or /and carbonate to coral is maintained in the mineral containing beverage. Lefebre teach a method of performing osmotic separation of seawater. Uhlinger teaches a desalination method and apparatus utilizing nanofiltraiton and reverse osmosis membranes. Sher et al. teach calcium-magnesium fortified water; juices, beverages and other liquid food products and process of make the same. Finley teaches a method for bringing nutrient rich water from the aphotic zone of the ocean to the photic zone with respect to desalination and providing nutrient rich desalted water. JP4044126057 teaches a seawater containing soft drink.

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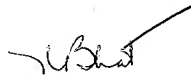
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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to N. Bhat whose telephone number is 703-308-3879.

The examiner can normally be reached on Monday-Friday, 9:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Milton Cano can be reached on 703-308-3959. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5665.



N. Bhat
Primary Examiner
Art Unit 1761